

Appl. No. 09/620253
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 2125 dated November 17, 2005

PATENT

REMARKS/ARGUMENTS

Claims 1 and 3-21 are pending in the application and stand rejected by U.S. Patent 6,464,494. Applicants will address this rejection below.

Examiner's Response to Applicants Arguments

At the outset, since the Examiner has previously appeared to make a series of rejections by moving back through a chain of patents and applications to Rubbert and Sachdeva, Applicants wish to expedite prosecution by summarizing why none of the patents and applications in this chain are available as prior art to the instant invention. The Examiner's previous rejection was based on U.S. 2004/0073417 to Rubbert (the '417 application) which claims to be a continuation-in-part of USSN 09/834,412, filed on April 13, 2001, and further to be a continuation-in-part of application number 09/560,640, filed on April 28, 2000, which was continuation-in-part of application number 09/451,609, filed on November 30, 1999. As Applicants previously pointed out in the prior response, the '417 application is not prior art to Applicants' invention because the instant application has an earlier filing date. Applicants have further reviewed the text of the earliest application (09/451,609) which issued as U.S. Patent No. 6,250,918, and find that the disclosures relied on previously by the Examiner are not present in that application. In regard to the '640 application, this application never published and went abandoned and is thus not available as prior art under 35 U.S.C. § 102(e) which requires that a patent application must have issued or published before the invention by the applicant.

Rejections Under 35 U.S.C. § 102(e)

Claims 1, 3-21 13 stand rejected under U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent 6,464,496 to Sachdeva et al. (The Examiner sometimes refers to the first inventor of this patent as Rubbert, but applicants believe that the Examiner meant to say Sachdeva). Applicants respectfully traverse this rejection in that Sachdeva does not teach all limitations of independent claim 1 and 13 and therefore, their respective dependent claims. In particular, nowhere does Sachdeva teach or suggest generating specific data comprising a tool

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path, or directing a tool along the tool path to fabricate a customized version of an object. Further, there is no teaching or even mention of a tool path in the sections of Sachdeva that the Examiner indicates in the instant office action (e.g., at Col, lines 1-20 and lines 30, 39). While the Examiner may contend that such teaching is inherent, Applicants respectfully point out that the courts have definitively held that inherency requires that skilled artisan deem a property or element to be "necessarily present" and not merely possible or even probable. See *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268-1269 (Fed. Cir. 1991). Applicants submit that skilled artisan would not deem the teaching of a tool path and thus, the direction of a tool along a tool path, to be necessarily present in the teachings of Sachdeva. As is explained below, if anything, Sachdeva actually teaches away from the use of a tool path.

While Sachdeva may teach the use of a robot to bend orthodontic wires (See Sachdeva at Col 9, lines 56-60), there is no teaching whatsoever of directing a tool along a path to fabricate the wires. The wires are already formed, the robot merely bends them. In fact, if anything, Sachdeva teaches away from directing a tool along a path to form an object since its robot must bend the wires in a series of separate steps (See Sachdeva at Col 13, lines 25-36).

In addition to the deficiencies described above, Applicants also traverse the rejection in that the Examiner premises her rejection on the contention that a number of the claim limitations are found in the drawings alone, e.g., Figs 1, 2 10 and 13. This contention is untenable in that the drawings do not show the limitations and the Examiner does not even indicate where in the drawings the limitations are. For example, no where does Fig. 2 show the limitation of generating a streamlined tool path and no where does Fig 10 show the limitation of "generating a mathematically smoothed version of the target path." Such is also the case for the alleged limitation on Figs 1 and 13 of Sachdeva.

The Examiner appears to be making inferences of methods steps in Applicants' inventions, based on flow charts and block/schematic drawings of Sachdeva that do not recite or otherwise show such steps. This approach does not meet the legal requirements for an anticipation rejection under 35 U.S.C. §102(e). Anticipation not only requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a

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single prior art reference." " but also that "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Inverness Medical Switzerland GmbH v. Warner Lambert Co.*, 309 F.3d 1373, 1382 USPQ2d 1926, 1933 (Fed. Cir. 2002). Here, the level of complete detail required by the courts is clearly lacking, in that the Examiner is attempting to put words in the text boxes of Sachdeva's drawings which simply do not exist. Also, while the Examiner may contend that such text is inherent, as described above, such inherency must be necessarily present. Applicants respectfully submit that the necessity requirement is not met in this case.

The rejections of claims 3-12 and 14-21 also fails for the same reasons as above since Sachdeva does not teach all limitations of independent claims 1 and 13. Further, the rejection of claim 3 is lacking in that nowhere does Fig. 3 of Sachdeva show a spline, let alone a tool path represented by a spline. The wire 104 of Sachdeva is shown to be straight in this figure. The rejection of claim 4 and 15 is also lacking in that Fig. 1 of Sachdeva shows neither an object that has an ideal model surface or the creation of a an idealized tool path from the idealized model surface. Nor can it, since Fig. 1 shows neither the shape of the alleged ideal object or a tool path. Fig. 1 only contains a subject face (not labeled) and text boxes for a schematic drawing. The rejection of claims 10 and 20 fails for similar reasons in that none of Figs 7-9 of Sachdeva disclose a source spline or tool orientation vectors, let alone using a source spline to define motion of the tool by defining tool orientation vectors. Nor can they since they don't even show a tool, let alone an orientation vector for the tool. Again, Applicants point that that case laws requires such elements to be necessarily present and such necessity is not present in the instant case.

Accordingly for all the reasons above, Applicants respectfully request withdrawal of the rejection.

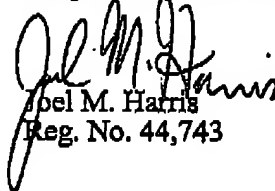
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CONCLUSION

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at (650) 326-2400.

Respectfully submitted,


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Attachments
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